

DPE25-1HMC

Summary

DPE25-1HMC is a 25W constant current driver, Output current
It can be easily set through the DIP switch.

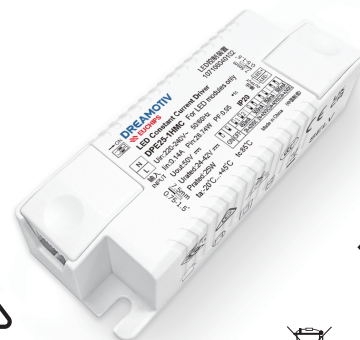
Product Features

- Single-channel constant current output
- Short circuit, overload, and Overcurrent Protection,
V0 grade flame-retardant shell
- Efficiency up to 87%
- The design of the end cap shell allows for easy disassembly,
facilitating installation in confined spaces
- No-load power consumption < 0.5W
- Warranty: 5 years @ Tc=80°C
- Protection level IP20, suitable for indoor Class II lighting fixtures

Application



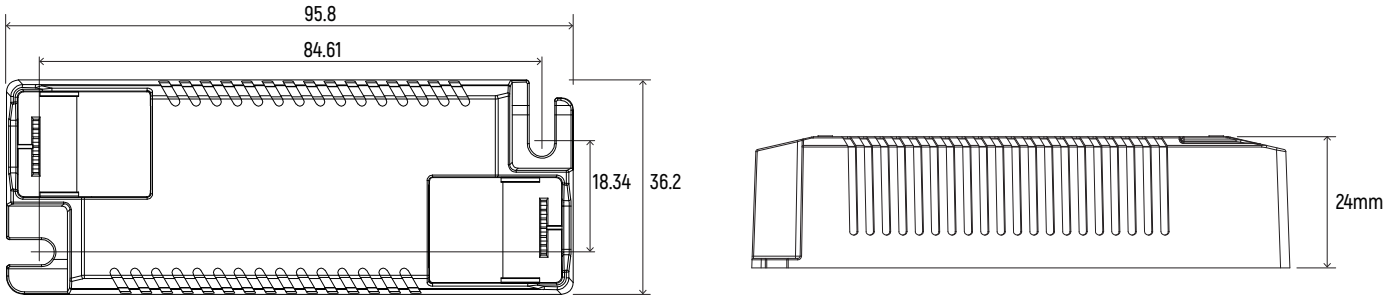
Down Light

IP20
SELV

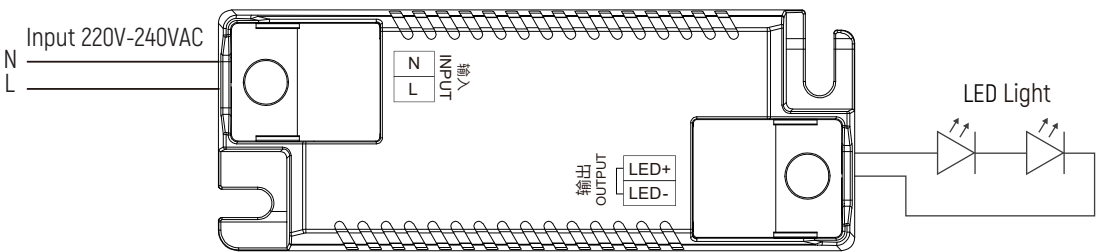
Technical Parameters

Model	DPE25-1HMC																																																											
Input	Input Voltage	220VAC-240VAC																																																										
	Frequency Range(Hz)	50/60Hz																																																										
	Input Current	0.14Amax@230VAC																																																										
	Power Factor	0.95@230VAC, full load																																																										
	Efficiency	87%@230VAC, full load																																																										
	THD	10%@230VAC, full load																																																										
	No load power	0.5W																																																										
	Inrush Current	Cold start, 20.6A@230VAC 100us																																																										
Output	Current/Voltage/power	450mA/24-42V			500mA/24-42V		550mA/24-42V		600mA/24-42V																																																			
	Current accuracy	±7.5%			Current Selection Table <table><tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr><tr><td>ON</td><td>OFF</td><td>1</td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="2"></td><td colspan="2">450mA</td><td colspan="2">500mA</td><td colspan="2">550mA</td><td colspan="2">600mA</td></tr><tr><td colspan="2"></td><td colspan="2">24-42VDC</td><td colspan="2">24-42VDC</td><td colspan="2">24-42VDC</td><td colspan="2">24-42VDC</td></tr><tr><td colspan="10">Note: The factory default setting current is 450mA(1,2 are in the OFF state).</td></tr></table>						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	ON	OFF	1	2									450mA		500mA		550mA		600mA				24-42VDC		24-42VDC		24-42VDC		24-42VDC		Note: The factory default setting current is 450mA(1,2 are in the OFF state).									
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	Note: The factory default setting current is 450mA(1,2 are in the OFF state).																																																											
	Line Regulation	±5% @ full load																																																										
Load Regulation	±5% @ full load																																																											
PstLM	≤1																																																											
SVM	≤0.4																																																											
Turn on delay Time	<0.5s, @230Vac(When the light begins to shine)																																																											
Protection	Short circuit Protection	Hiccup, Auto-Recovery when the fault is removed																																																										
	Overcurrent Protection	Hiccup, Auto-Recovery when the fault is removed																																																										
	Overload Protection	Load power ≥ 120% protection; protection hiccup, troubleshooting, and normal output																																																										
Safety& EMC	Surge	L-N:1KV																																																										
	Withstand Voltage	I/P-O/P: 3750VAC/1min/5mA																																																										
	EMC Emission	CCC [China]	GB19510.1, GB19510.14			TUV [Germany]		EN61347-1, EN61347-2-13, EN62493																																																				
		CB [CBmember states]	IEC61347-1, IEC61347-2-13			CE [European Union]		EN61347-1, EN61347-2-13, EN62384																																																				
		RCM [Australia]	AS 61347-1, AS 61347-2-13			ENEC [Europe]		EN61347-1, EN61347-2-13, EN62384																																																				
	EMC Immunity	CCC [China]	GB/T17743, GB17625.1																																																									
		CE [European Union]	EN55015, EN61000-3-2, EN61000-3-3, EN61547																																																									
		RCM [Australia]	EN55015, EN61000-3-2, EN61000-3-3, EN61547																																																									
EMC Immunity	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547																																																											
Environment	Working Temp	-20℃~45℃																																																										
	Storage Temp	-25℃~85℃																																																										
	Storage Humidity	20-90%RH (No condensation)																																																										
Others	RoHS	Comply with 2011/65/EU																																																										
	tc	85℃																																																										
	Material	PC																																																										
	IP Rating	IP20																																																										
	Lifetime	30,000 @ Tc=85℃																																																										
	Warranty Condition	5 years@Tc=80℃																																																										
	Switch Cycle	25,000times																																																										
	Body size	95.8*36.2*24mm(L*W*H)																																																										
	Packing(weight)	Net weight: 58g±5%/PCS; 120PCS/Carton; 6.96kg±5%/Carton; Carton Size: 367*292*137mm(L*W*H)																																																										
Noise	In a quiet environment , No noise outside 30-50cm																																																											
Remark	All parameters were measured at an input voltage of 230VAC/50Hz , an ambient temperature of 25℃ and 50% humiditywithout any special instructions.																																																											

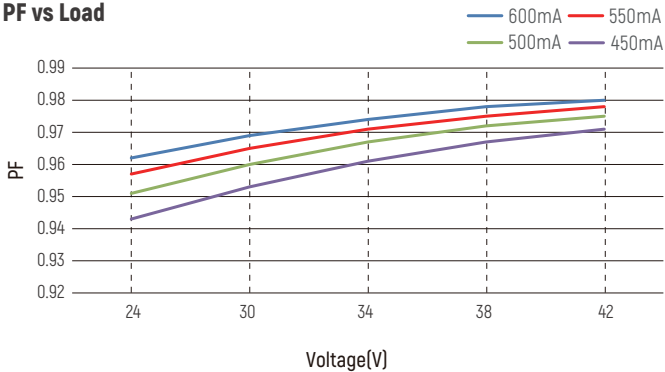
Dimension(mm)



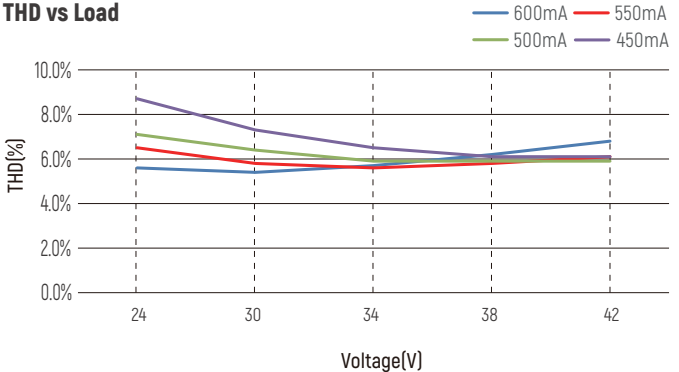
Wiring



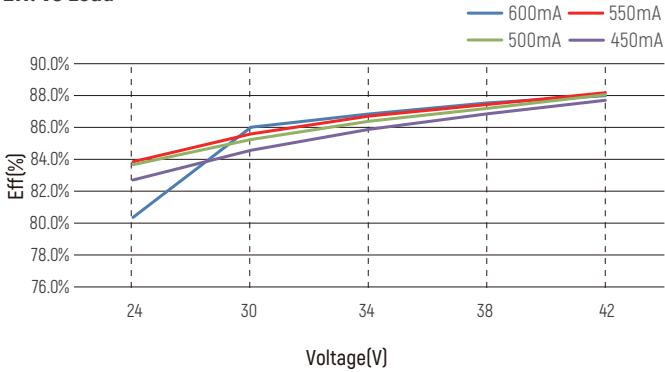
PF vs Load



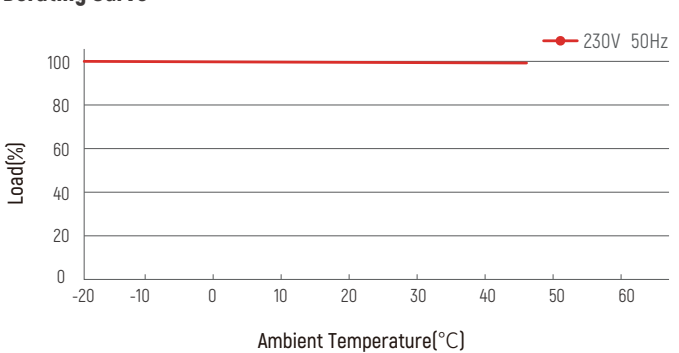
THD vs Load



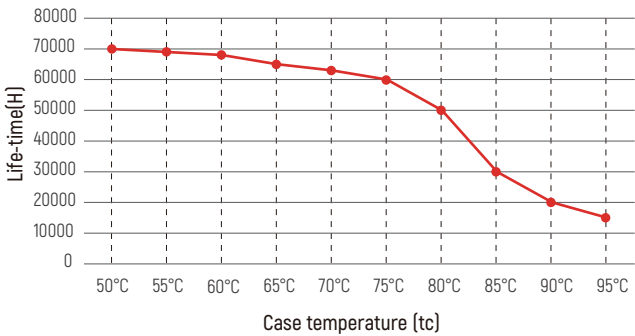
Eff. vs Load



Derating Curve

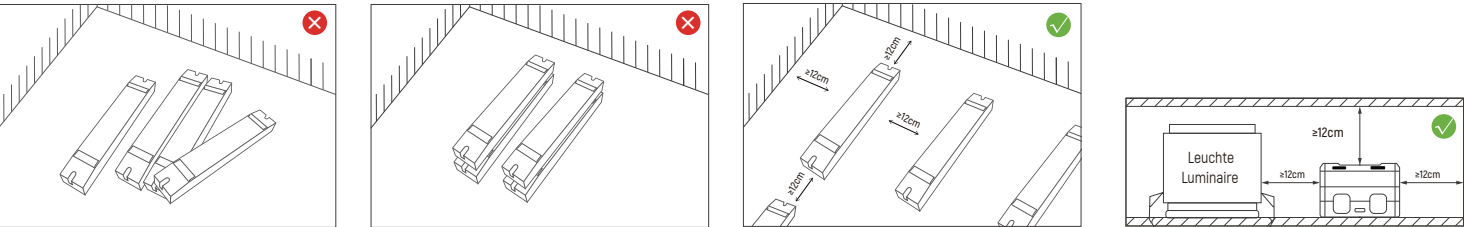


Life-time vs. case temperature



The life-time of the led driver is shown in the figure above
[calculated based on the 90% survival rate].
The relation of tc to temperature depends also on the luminaire design.

Installation Precautions



Please do not stack the products. The distance between two products should be >12cm so as not to affect heat dissipation and the lifespan of the products.

Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Condition
Inrush current Ipeak	20.6A	Input Voltage 230V
Inrush current Twidth	100us	Input Voltage 230V measured to 50% Ipeak

MCB	Input Voltage 230V Drivers	MCB	Input Voltage 230V Drivers
B10	41pcs	C10	69pcs
B13	54pcs	C13	90pcs
B16	66pcs	C16	110pcs
B20	83pcs	C20	138pcs
		D16	114pcs

Cautions

This product must be installed and adjusted by a qualified professional.		
1	Confirmation of installation conditions	· Waterproof and Protection: Install in a suitable location according to the waterproof and protection requirements of the power supply. Products without waterproof function should be protected from direct sunlight and rain. When installing outdoors, please use a waterproof box for protection. · Heat dissipation requirements: The drive power supply should avoid exposure to high temperature environments. Please ensure that the working environment temperature is within the recommended range. To ensure proper heat dissipation of the drive power supply, a well ventilated area should be selected for installation. Good heat dissipation conditions can help extend product lifespan.
2	Power check	· Before use, check the product parameters and confirm that the output voltage and current of the LED power supply meet the requirements
3	Safe wiring	· Use cables that meet the specifications to ensure that the cross-section of the wire matches the requirements of the driving power supply. Typically, the input wire diameter ranges from 0.75 to 1.5mm², Output wire diameter: solid cables ranging from 0.5 to 1.5mm², (Please refer to the silk screen printing or wiring diagram in the instruction manual for specific wire diameter requirements). · If the power supply (metal casing) is installed on a grounded lighting component or equipment, the power supply needs to be grounded.
4	Wiring confirmation	· Before power on debugging, ensure that the wiring is secure and avoid poor contact to prevent unstable current or equipment damage.
5	Repair suggestions	· If the product malfunctions, please do not repair it without authorization. If you have any questions, please contact the supplier or sales team for assistance.

※ The contents of this manual are updated without prior notice. If the function of the product you are using is inconsistent with the instructions, the function of the product shall prevail. Please contact us if you have any questions .

Warranty Agreement

1. Warranty periods from the date of delivery : 5 years.
2. Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

The following situations are not covered by the free warranty or replacement service:

1. Exceeding the warranty period.
2. Damage caused by human factors such as high voltage, overload, and improper operation.
3. The appearance of the product is severely damaged or deformed.
4. Normal wear and tear or aging during regular product use.
5. Damage caused by natural disasters or force majeure factors.
6. The quality inspection label of the product is damaged (QC PASS).
7. No contract or valid invoice proof signed with EUCHIPS has been provided.

※ Remedies: Repair or replacement is the only remedy provided by EUCHIPS to the customer, and EUCHIPS shall not be liable for incidental damages arising from repair or replacement, unless within the scope of applicable law.

※ Adjustment of Warranty Terms: EUCHIPS reserves the right to modify or adjust the warranty terms, which shall be published in writing.

DPE25-1HMC

概述

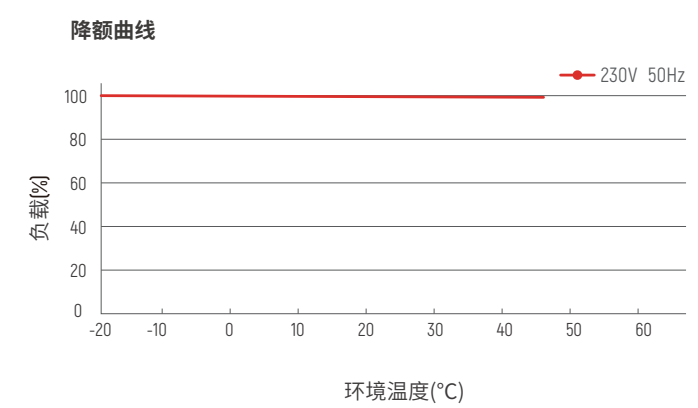
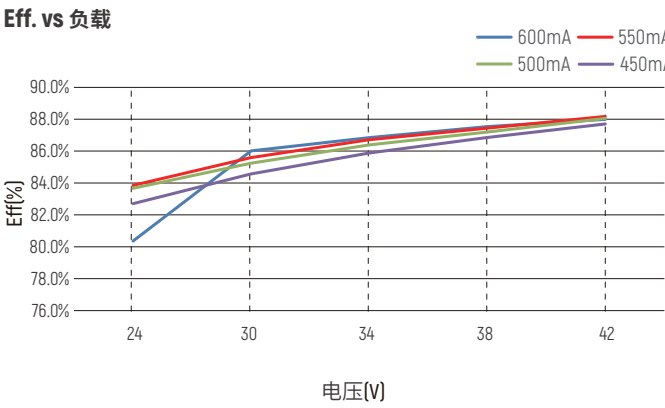
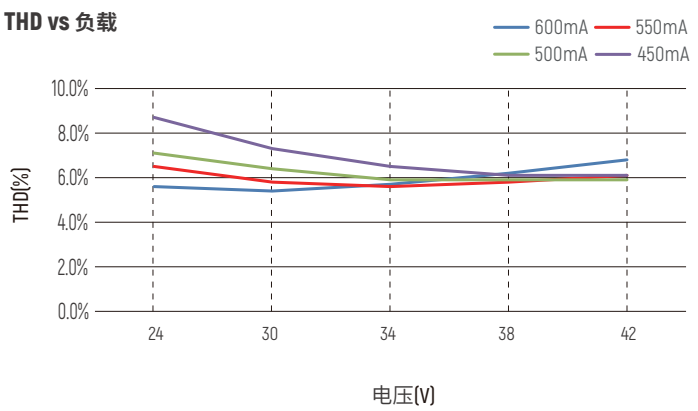
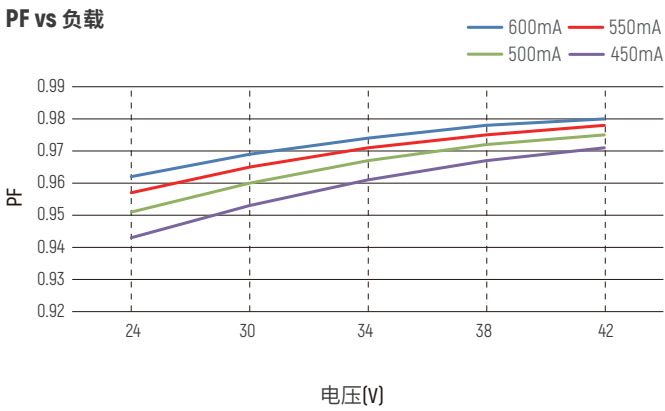
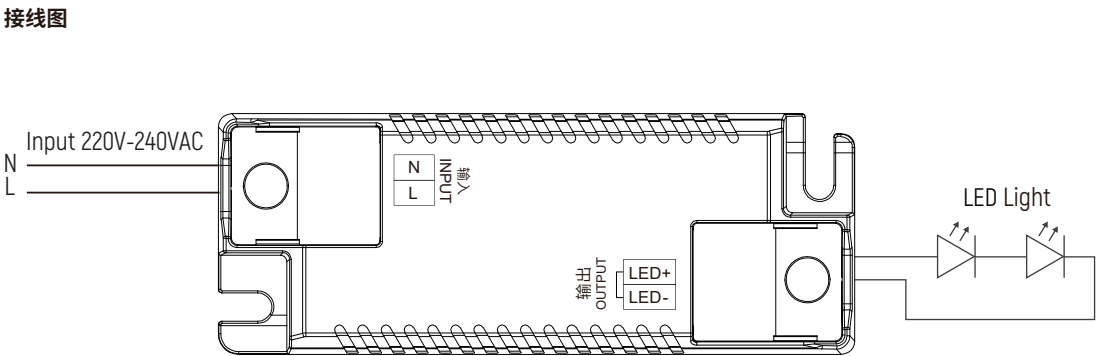
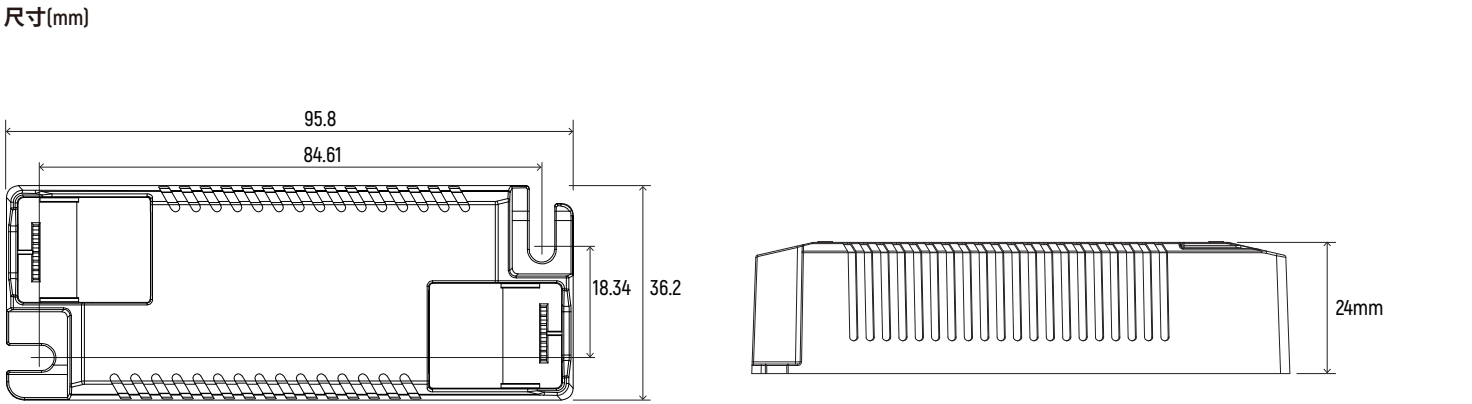
DPE25-1HMC是一款25W恒流驱动器, 输出电流可通过DIP拨码开关简易设置。

产品特点

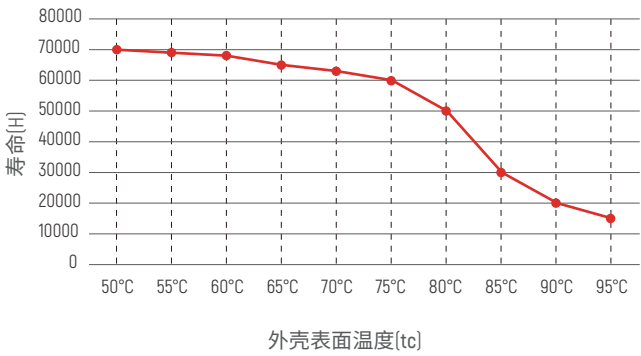
- 单通道恒流输出
- 短路、过载、过流保护, V0级阻燃外壳
- 效率高达 87%
- 小尺寸设计, 便于安装狭窄空间内
- 空载功耗<0.5W
- 质保: 5年@Tc=80°C
- 防护等级IP20, 适用于室内 II 类灯具

技术参数

产品型号	DPE25-1HMC																							
输入	输入电压	220VAC-240VAC																						
	频率范围	50/60Hz																						
	输入电流	0.14Amax@230VAC																						
	功率因数	0.95@230VAC, 满载																						
	效率	87%@230VAC, 满载																						
	谐波THD	10%@230VAC, 满载																						
	空载功耗	0.5W																						
	浪涌电流	冷启动, 20.6A@230VAC 100us																						
输出	输出电流/电压/功率	450mA/24-42V		500mA/24-42V	550mA/24-42V	600mA/24-42V																		
	电流精度	±7.5%		电流选择表 <table><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>ON</td><td>OFF</td><td>450mA</td><td>500mA</td><td>550mA</td><td>600mA</td></tr><tr><td colspan="2"></td><td>24-42VDC</td><td>24-42VDC</td><td>24-42VDC</td><td>24-42VDC</td></tr></table> 备注：出厂默认设置电流为450mA(12在OFF状态)									ON	OFF	450mA	500mA	550mA	600mA			24-42VDC	24-42VDC	24-42VDC	24-42VDC
	ON	OFF	450mA				500mA	550mA	600mA															
			24-42VDC				24-42VDC	24-42VDC	24-42VDC															
	线性调整率	±5% @ 满载																						
	负载调整率	±5% @ 满载																						
PstLM	≤1																							
SVM	≤0.4																							
保护	启动时间	<0.5s, @230Vac(当灯光开始亮起)																						
	短路保护	打嗝, 排除故障后自恢复																						
	过流保护	打嗝, 排除故障后自恢复																						
	过载保护	负载功率≥120%保护; 保护打嗝, 排除故障输出正常																						
安规与电磁兼容	雷击浪涌	L-N:1KV																						
	耐压标准	I/P-Q/P: 3750VAC/1min/5mA																						
	安全规范	CCC [中国]	GB19510.1, GB19510.14		TUV [德国]	EN61347-1, EN61347-2-13, EN62493																		
		CB [CB成员国]	IEC61347-1, IEC61347-2-13		CE [欧盟]	EN61347-1, EN61347-2-13, EN62384																		
		RCM [澳洲]	AS 61347-1, AS 61347-2-13		ENEC [欧洲]	EN61347-1, EN61347-2-13, EN62384																		
	电磁兼容	CCC [中国]	GB/T17743, GB17625.1																					
		CE [欧盟]	EN55015, EN61000-3-2, EN61000-3-3, EN61547																					
RCM [澳洲]		EN55015, EN61000-3-2, EN61000-3-3, EN61547																						
EMC抗扰度	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547																							
环境	工作温度	-20°C-45°C																						
	储存温度	-25°C-85°C																						
	储存湿度	20-90%RH (无凝露)																						
其他	RoHS	遵守 2011/65/EU																						
	tc	85°C																						
	材质	PC																						
	防水等级	IP20																						
	寿命	30,000h@tc:85°C																						
	质保	5年@Tc=80°C																						
	开关周期	25,000times																						
	裸机尺寸	95.8*36.2*24mm(长*宽*高)																						
	包装尺寸[重量]	净重: 58g±5%/PCS; 120PCS/ Carton; 6.96kg±5%/箱; 外箱尺寸: 367*292*137mm(长*宽*高)																						
噪音	安静环境下, 30-50cm以外无噪音																							
备注	全部参数无特别说明, 均在输入电压230VAC/50Hz, 25°C的环境温度和50%的湿度下测得。																							

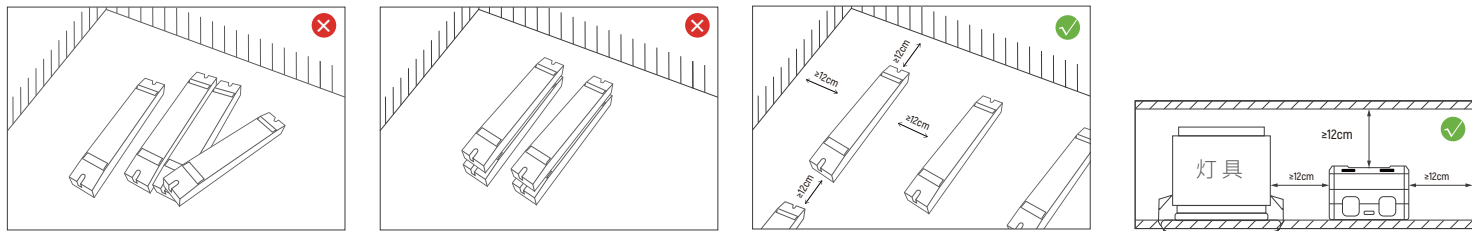


寿命 vs tc温度



LED驱动器的使用寿命如上图所示（根据90%的带载率计算）。
tc-ta温度的关系也取决于灯具的设计。

安装规范要求



请勿将产品堆叠摆放，产品与产品间隔距离应 $\geq 12\text{cm}$ ，避免影响产品散热和使用寿命。

断路器带载说明

规范项	值	备注
浪涌电流 I _{peak}	20.6A	输入电压230V
浪涌电流 T _{width}	100us	输入电压230V, 在50%I _{peak} 下测试

MCB	输入电压230V 驱动器数量	MCB	输入电压230V 驱动器数量
B10	41pcs	C10	69pcs
B13	54pcs	C13	90pcs
B16	66pcs	C16	110pcs
B20	83pcs	C20	138pcs
		D16	114pcs

注意事项

本产品应由具备专业资格的人员进行调试与安装		
1	安装条件确认	·防水与防护: 根据电源的防水和防护要求, 选择合适的位置安装。无防水功能的产品应避免日晒雨淋, 户外安装时请使用防水箱保护。 ·散热要求: 驱动电源应避免暴露在高温环境中。请确保工作环境温度在推荐范围内。为确保驱动电源正常散热, 安装时应选择通风良好的地方。良好的散热条件有助于延长产品寿命。
2	电源检查	·使用前, 检查产品参数, 确认LED电源的输出电压、电流符合要求
3	安全接线	·需使用符合规格的线缆, 确保导线的截面与驱动电源要求匹配。通常为输入线径:0.75-1.5mm2, 输出线径:0.5-1.5mm2的实心线缆, (具体线径要求请参阅丝印或说明书接线图)。 ·若电源(金属外壳)安装在已接地的灯具部件或设备上, 需要对电源进行接地处理。 ·避免热插拔, 连接 LED 负载前应断电并重启驱动。
4	接线确认	·通电调试前, 确保接线牢固, 避免接触不良, 以防电流不稳或设备损坏。
5	维修建议	·如产品发生故障, 请勿私自维修。如有疑问, 请联系供应商或销售处理。

※本说明书如有更新, 恕不另行通知。如产品功能与说明书不符, 以实际产品为准。

保修条例

1. **保修期:**自产品出厂之日起, 享有 **5年保修期**。
2. **保修服务:**在保修期内, 如因产品质量问题, 欧切斯将提供**免费修理或更换**服务。

非保修条例

以下情况不在免费保修或更换服务范围内:

1. 超出保修期。
2. 由于过高电压、超负载、操作不当等人为原因造成的损坏。
3. 产品外观严重损坏或变形。
4. 产品正常使用过程中产生的磨损或老化。
5. 自然灾害或不可抗力因素造成的损坏。
6. 产品的质量检验标签损坏 (QC PASS)。
7. 未提供与欧切斯签订的合同或有效发票凭证。

※补救措施:修理或更换是欧切斯对客户的一补救方式, 且欧切斯不承担因修理或更换产生的附带损害赔偿 responsibility, 除非在适用法律范围内。

※保修条款的调整:欧切斯保留修改或调整保修条款的权利, 并以书面形式发布为准。